

Recombinant Human PDGF-CC

Catalog # PBG10358

Specification

Recombinant Human PDGF-CC - Product Information

Recombinant Human PDGF-CC - Additional Information

Description

The platelet-derived growth factor (PDGF) family of heparin-binding growth factors consists of five known members, denoted PDGF-AA, PDGF-BB, PDGF-AB, PDGF-CC and PDGF-DD. The mature and active form of these proteins, an anti-parallel disulfide-linked dimer of two 12-14 kDa polypeptide chains, is obtained through proteolytic processing of biologically inactive precursor proteins, which contain an N-terminal CUB domain and a PDGF/VEGF homologous domain. The PDGFs interact with two related protein tyrosine kinase receptors, PDGFR- α and PDGFR- β , and are potent mitogens for a variety of cell types, including smooth muscle cells, connective tissue cells, bone and cartilage cells, and certain tumor cells. They play an important role in a number of biological processes, including hyperplasia, chemotaxis, embryonic neuron development, and respiratory tubules epithelial cell development. Mature PDGFs are stored in platelet α -granules and are released upon platelet activation. PDGF-AA, -AB, -BB and -CC signal primarily through the PDGF-R α receptor, whereas PDGF-DD interacts almost exclusively with the PDGF-R α receptor. Recombinant human PDGF-CC is a 25kDa protein consisting of two identical disulfide-linked 114 amino-acid polypeptide chains.

BiologicalActivity

Determined by the dose-dependent stimulation of the proliferation of Balb/c 3T3 cells. The expected The ED₅₀ for this effect is 15-20 ng/ml.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is $<0.1 \text{ ng/} \mu\text{g}$ of protein ($<1EU/\mu\text{g}$).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

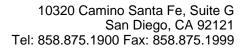
-20°C

Precautions

Recombinant Human PDGF-CC is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human PDGF-CC - Protocols

Provided below are standard protocols that you may find useful for product applications.





• Western Blot

- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Recombinant Human PDGF-CC - Images